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VOL. 23 NOS. 1-4 January 1973

Cooperative Economic Insect Report

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PLANT PROTECTION AND QUARANTINE PROGRAMS
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ANIMAL AND PLANT HEALTH INSPECTION SERVICE
PLANT PROTECTION AND QUARANTINE PROGRAMS
PEST SURVEY AND TECHNICAL SUPPORT STAFF

The Cooperative Economic Insect Report is issued weekly as a service to American Agriculture. Its contents are compiled from information supplied by cooperating State, Federal, and industrial entomologists and other agricultural workers. In releasing this material the Service serves as a clearing house and does not assume responsibility for accuracy of the material.

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COOPERATIVE ECONOMIC INSECT REPORT

HIGHLIGHTS

Current Conditions

Losses due to TOBACCO HORNWORM and TOMATO HORNWORM on flue cured tobacco in North Carolina lower in 1972 than in 1971. (p. 3).

CALIFORNIA FIVESPINED IPS and MOUNTAIN PINE BEETLE damaged pines in California. (p. 4).

Detection

● An APHID reported for first time in the United States. (p. 8).

A HARD TICK reported for first time from New Hampshire. (p. 5).

For new county and parish records see page 8.

Special Reports

The 1973 outlook for GRASSHOPPERS based on the 1972 adult survey. See centerfold map.

● Insect Detection in the United States. Eleven new United States records reported. (pp. 9-15).

State Survey Coordinators. (pp. 16-19).

Cooperative Survey Entomologists. (pp. 20-22).

Insects Not Known to Occur in the United States.
Stone Fruit Weevil (Furcipus rectirostris (L.)). (pp. 23-24).

NOTE: An Annotated Host Catalog of the Fruit Flies of America North of Mexico (Diptera: Tephritidae) by M.S. Wasbauer is available upon request without charge from Laboratory Services/Entomology, California Department of Agriculture, Sacramento, California 95814. Ask for Occasional Papers No. 19.

Reports in this issue are for weeks ending December 29, 1972, through January 19, 1973, unless otherwise indicated.

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NATIONAL WEATHER SERVICE'S 30-DAY OUTLOOK

MID-JANUARY TO MID-FEBRUARY 1973

The National Weather Service's 30-day outlook for mid-January to mid-February is for temperatures to average above seasonal normals in the Pacific Northwest and over the northern half of the Nation east of the Divide except for near normal in the middle and north Atlantic Coast States. Below normal temperatures are expected across the South and also in the Great Basin. In unspecified areas near normal temperatures are in prospect. Precipitation is expected to exceed normal over the gulf and south Atlantic coast regions as well as the north Pacific coast. Subnormal totals are indicated for the northern Plains and the Midwest. Elsewhere near normal precipitation is expected.

Weather forecast given here is based on the official 30-day "Resume and Outlook" published twice a month by the National Weather Service. You can subscribe through the Superintendent of Documents, Washington, D.C. 20250. Price $5.00 a year.

SPECIAL INSECTS OF REGIONAL SIGNIFICANCE

GREENBUG (Schizaphis graminum) - TEXAS - Populations on wheat below economic levels in Panhandle, Rolling Plains, and north-central areas week ending January 12. Very cold weather responsible for inactivity. (Green). OKLAHOMA - Averaged 2 per linear foot in wheat checked in Mayes County. (Okla. Coop. Sur.). KANSAS - Averaged 0.4 per drill row foot in early planted wheat (5-inch) field near Sedan, Chautauqua County. (Bell).

CORN, SORGHUM, SUGARCANE

CORN ROOTWORMS (Diabrotica spp.) - WISCONSIN - Soil samples collected in September 1972 indicated State average of 1.45 eggs per pint of soil. Average counts per pint of soil by district: West-central 2.7, southwest 1.7, south-central 1.5, southeast 1.8, and east-central, central, north-central, and northwest zero. Counts of 0-5 eggs per pint noneconomic; 6-15 eggs per pint moderate; 16+ eggs per pint heavy or potentially damaging. (Wis. Ins. Sur.).

TURF, PASTURES, RANGELAND

RANGE CRANE FLY (Tipula simplex) - CALIFORNIA - Infestations in foothill areas of Tulare County heavy; treatment being applied to cattle ranges. Several thousand acres of rangeland severely damaged in 1972. Current infestation extends into Fresno County. (Cal. Coop. Rpt.).

FIRE ANT (Solenopsis geminata) - TEXAS - Reported from Brazos and Leon Counties week ending January 12. Heavy infestations seen in pastureland near Jewett, Leon County. (Green, Cole).

AN ARMORED SCALE (Odonaspis saccharicaulis) - FLORIDA - Taken on pangolagrass (Digitaria decumbens) at Fort Drum, Okeechobee County, November 21, 1972, by W.E. Wynn and H.L. Gillis. This is a new county record. (Fla. Coop. Sur.).

FORAGE LEGUMES

ALFALFA WEEVIL (Hypera postica) - TEXAS - Activity much reduced in Brazos and Burleson Counties during week ending January 19. Eggs averaged 100 per square foot, adults 1 per square foot. First larvae noted. (Latham). OKLAHOMA - Egg counts in Payne County increased to 25 per square foot in samples collected January 4. (Okla. Coop. Sur.).

THREECORNERED ALFALFA HOPPER (Spissistilus festinus) - ARIZONA - Averaged 55 per 100 sweeps of alfalfa in Maricopa County. Decrease expected due to unfavorable weather latter part of period. (Ariz. Coop. Sur.).

TOBACCO

HORNWORMS (Manduca spp.) - NORTH CAROLINA - Losses due to M. sexta and M. quinquemaculata on flue cured tobacco about 57 percent less in 1972 than in 1971. Some 340,000 acres of flue cured tobacco grown in 1972. (Robertson).

COLE CROPS

CABBAGE LOOPER (*Trichoplusia ni*) - ARIZONA - This species and *Myzus persicae* (green peach aphid) required controls in lettuce fields at Yuma, Yuma County, despite cool weather. Wind and rain caused difficulty in scheduling treatments. (Ariz. Coop. Sur.).

CITRUS

PURPLE SCALE (*Lepidosaphes beckii*) - FLORIDA - Taken on Hamlin orange (*Citrus sinensis*) at Okeechobee, Okeechobee County, November 20, 1972, by W.E. Wynn and H.L. Gillis. This is a new county record. (Fla. Coop. Sur.).

BROWN SOFT SCALE (*Coccus hesperidum*) - CALIFORNIA - Averaged 10 scales per stem on grapefruit trees at Bonita, San Diego County. (Cal. Coop. Rpt.).

ORNAMENTALS

TEA SCALE (*Fiorinia theae*) - ALABAMA - All stages occurring on several hundred plants examined in Lee County during the week ending January 12. This scale continues to be the most important insect affecting camellia throughout State. (McQueen).

AN ARMORED SCALE (*Pseudaonidia paeoniae*) - SOUTH CAROLINA - Light on azaleas at residence in Newberry County. Determined by D.K. Pollet. This is a new county record. (McCaskill).

EUONYMUS SCALE (*Unaspis euonymi*) - SOUTH CAROLINA - Specimens taken from euonymus in Williamsburg County November 29, 1972, by L.B. Harrington. Determined by D.K. Pollet. This is a new county record. (McCaskill).

FOREST AND SHADE TREES

CALIFORNIA FIVESPINED IPS (*Ips confusus*) - CALIFORNIA - Hundreds of ornamental Monterey pine trees killed around bay area and into Santa Clara County. Some very large, old trees are dead or dying. (Cal. Coop. Rpt.).

MOUNTAIN PINE BEETLE (*Dendroctonus ponderosae*) - CALIFORNIA - Epidemic infestations killed hundreds of lodgepole pines on south end of Lake Tahoe. About 150 acres of private land involved. (Cal. Coop. Rpt.).

NANTUCKET PINE TIP MOTH (*Rhyacionia frustrana*) - ALABAMA - One to 4 pupae per tip on 15-50 percent of all 6 to 8-foot pine trees along highway planting in Macon County. (McQueen).

FOREST AND SHADE TREES

WALKINGSTICK (*Diapheromera femorata*) - TEXAS - Taken October 27, 1972, at Lufkin, Angelina County. Collected and determined by D. Kucera. This is a new county record. (Pierce).

A GALL MIDGE (*Taxodiomyia cupressiananassa*) - INDIANA - Galls of this species found under bald cypress trees (*Taxodium distichum*) in Warrick, Spencer, and Perry Counties December 7, 1972, by B. Cummings and V. Knapp. These are new county records. (Cummings, Knapp).

MAN AND ANIMALS

SCREWWORM (Cochliomyia hominivorax) - Total of 128 confirmed cases reported in continental U.S. during period December 17 to January 13. Three of these were in Arizona, the rest in Texas. Number of sterile flies released in U.S. this period totaled 376,751,600 all in Texas. There were 788 confirmed cases and a total of 409,652,500 sterile flies released in Mexico this period. (Anim. Health).

COMMON CATTLE GRUB (Hypoderma lineatum) - OKLAHOMA - Ranged 10-20 per head on 5 young cows in Wagoner County. Counts averaged 9 per mature cow in Oklahoma County stockyard. Averaged 17 (maximum 42) per head on mature cows in Noble County. Heavy in Pawnee County, light in Payne and Johnston Counties. (Okla. Coop. Sur.).

HORN FLY (Haematobia irritans) - FLORIDA - Averaged about 200 adults per beef animal at Gainesville, Alachua County, January 9, 1973. Expected to decrease due to recent cool weather. (Fla. Coop. Sur.).

SHORTNOSED CATTLE LOUSE (Haematopinus eurysternus) - OKLAHOMA - Very heavy on one herd of cattle in Major County. Heavy populations building up in Pawnee County. Reported moderate in Johnston, McCurtain, and Lincoln Counties. Light on dairy and stocker cattle in Payne, Noble, and Pottawatomie Counties. (Okla. Coop. Sur.).

A HARD TICK (Amblyomma dissimile) - NEW HAMPSHIRE - Nymph taken from snake, Constrictor constrictor, in laboratory at Durham, Strafford County, November 29, 1972, by J.S. Trumbull. Determined by J.E. Keirans. This is a new State record. This species common on reptiles and amphibians in South and Central America and has been taken on snakes in Florida. (Blickle).

HOUSEHOLDS AND STRUCTURES

A POWDERPOST BEETLE (Lyctus brunneus) - ALABAMA - Larvae and adults found heavy and damaging window trim of home at Orange Beach, Baldwin County, October 10, 1972. Building material was imported banak (Virola sp.) wood. (McQueen). See CEIR 22(49-52): 781 for additional report of L. brunneus in State. (PP).

STORED PRODUCTS

NAVEL ORANGEWORM (Paramyelois transitella) - CALIFORNIA - Larvae damaged almond nuts in many locations. An estimated 10-percent loss of 1972 crop occurred in commercial almonds. (Cal. Coop. Rpt.).

PECAN WEEVIL (Curculio caryae) - NEW MEXICO - Total of 233 pounds of weevil-infested pecans condemned at retail outlets in Albuquerque, Bernalillo County. (Heninger).

BENEFICIAL INSECTS

ICHNEUMON WASPS - MISSOURI - Bathyplectis curculionis, a parasite of Hypera postica (alfalfa weevil), taken from alfalfa litter samples in Cass and Cedar Counties December 28 and 29, 1972; Barton County January 4, Cooper and Moniteau Counties January 16, and in Cole and Miller Counties January 18, 1973, by J.L. Huggans. These are new county records. (Munson). VIRGINIA - Diplazon laetatorius emerged from syrphid pupa on alfalfa September 26, 1972, in Botetourt County. Collected by W.A. Allen. Determined by R.W. Carlson. This is a new county record. (Allen).

FEDERAL AND STATE PLANT PROTECTION PROGRAMS

IMPORTED FIRE ANTS (Solenopsis spp.) - ALABAMA - Mound building by established broods of S. richteri very active throughout State. Many mounds in pastures, woods, fields, and along roadsides now 10-18 inches high. (McQueen). FLORIDA - S. invicta taken from roadside of U.S. Highway 27 in Lafayette County February 22, 1972, by Wilson and Gilliard. GEORGIA - S. invicta taken from roadside of Highway 78 at Tallapoosa, Haralson County, by W.C. Stewart January 29, 1972. Also collected from road shoulder of Old River Road in Jenkins County by H.L. Quattlebaum April 20, 1972. TEXAS - S. invicta collected from city of East Mountain, Upshur County, November 9, 1972; also taken in Marion County March 27, 1972. Both collections by B.J. Tapscott. Determined by D.R. Smith. These are all new county records. (PP).

PINK BOLLWORM (Pectinophora gossypiella) - TEXAS - Taken from green cotton bolls November 1, 1972, in Archer County; from lint cleaner in Baylor and Knox Counties November 9 and 10, 1972, respectively; also taken from lint cleaner in Childress County December 7, 1972, and in Hall County December 8, 1972. Collections made by F. Presston. Determined by D.M. Weisman. These are new county records. (PP).

WHITEFRINGED BEETLES (Graphognathus spp.) - LOUISIANA - G. pereginus light on po-joe and crabgrass at Fort Polk Army Base in Vernon Parish July 21, 1972. G. leucoloma fecundus taken from goldenrod in Winn Parish August 8, 1972. G. peregrinus light on po-joe in Red River Parish August 29, 1972. G. peregrinus collected from roadside in Natchitoches Parish November 7, 1972. All collections by L. Sandov. TEXAS - G. peregrinus taken from po-joe weed along railroad tracks in Hardin County August 29, 1972, by B.D. Green. GEORGIA - Graphognathus sp. observed on goldenrod in Pierce County July 27, 1972. Collected by M.T. Wetherington. KENTUCKY - G. leucoloma striatus collected by R.B. Owens from weed field in McCracken County July 13, 1972. SOUTH CAROLINA - G. leucoloma striatus taken from aster in parking area at Barnwell, Barnwell County, August 3, 1972. Collected by P.W. Langford. All determined by R.E. Warner. These are new parish and county records. (PP).

WOOLLY WHITEFLY (Aleurothrixus floccosus) - CALIFORNIA - State Personnel treated 815 trees on 8 infested properties in new infestation at Fallbrook, San Diego County. (Cal. Coop. Sur.).

HAWAII INSECT REPORT

Corn - CORN EARWORM (Heliothis zea) in sweet corn on Oahu, trace in 3 acres at Pupukea week ending December 29, 1972, (Kawamura), and heavy in 0.5 acre at Waimanalo week ending January 19, 1973, (Otsuka).

General Vegetables - Oviposition scars of MELON FLY (Dacus cucurbitae) on about 100 percent of fruits in one acre of cucumber and young fruits in adjacent 0.5 acre of sweet pepper at Pupukea, week ending December 29, 1972. All stages of GREENHOUSE WHITEFLY (Trialeurodes vaporariorum) very heavy in 0.6 acre of bitter melon and adjacent 0.2 acre of see-qua at Pupukea during same period. Adults trace in 0.3 acre of bitter melon at Haleiwa. (Kawamura). BEET ARMYWORM (Spodoptera exigua) and LEAFMINER FLIES (Liriomyza spp.) light to moderate in 0.75 acre of ready-to-harvest green onions at Waianae, Oahu. S. exigua larvae light, damage moderate, in 5,000 square feet of horenso (Spinacia oleracea) at Waimanalo; 30 percent of leaves damaged. CARMINE SPIDER MITE (Tetranychus cinnabarinus) moderate to heavy in snap beans at Waianae. All during week ending January 5. (Ikehara, Kawamura). These pests light in 0.5 acre of same host at Pearl City week ending January 12, with about 15 percent of leaves affected. (Kawamura).

Fruits and Nuts - COCONUT SCALE (Aspidiotus destructor) spotty, colonies moderate mostly on older leaves of 20 percent of plants in small banana planting at Pearl City, Oahu, week ending January 12. Nymphs and adults of Telsimia nitida and Lindorus lophanthae (lady beetles) moderate on scale infested leaves. (Kawamura).

Forest and Shade Trees - An ADELGID (Pineus pini) moderate on 12 of 40 Pinus sp. saplings at Ulupalakula, Maui, week ending January 12. This is new area of infestation. Eradication efforts continue at all infested areas on island. (Miyahira). During same period, larvae of CERAMBICID BEETLES (Plagithymus perrottetiae and P. diana) severely damaged and killed native forest plants, olomea (Perrottetia sandwicensis) and alani (Pelea sp.), along Kaluapuki and Pihea Trails on Kauai. (Davis). FULLER ROSE BEETLE (Pantomorus cervinus) adults trace on terminals of 50+ Acacia confusa trees at Pupukea, Oahu, week ending January 19. Larvae of a NOCTUID MOTH (Melipotis indomita) light on monkeypod and kiawe trees throughout Oahu same period. Light trap catches indicate adults at moderate levels past 3 months. (Kumashiro, Kahale).

Man and Animals - Total of 306 Aedes vexans nocturnus and 2,792 Culex pipiens quinquefasciatus collected in 58 light traps operated on Oahu during December 1972. (Mosquito Control Branch, Hawaii Dept. Health).

Beneficial Insects - PUNCTUREVINE STEM WEEVIL (Microlarinus lypriformis) larvae heavy on roadside Tribulus terrestris at Puunene, Maui, week ending December 29, 1972. (Miyahira). Nymphs and adults of a TINGID BUG (Leptobyrsa decora) moderate in 30 square yards of roadside lantana at Kokee, Kauai, same period. (Sugawa). Field examination of Melastoma malubathricum at Hilo, Hawaii, during week ending January 12 showed 38 and 22 percent infestations of fruits and terminals, respectively, by larvae of an ARCTIID MOTH (Selca brunella). Percent infestation on Kauai, 54 at Hanahanapuni and 18 at Knudsen Gap. (Yoshioka, Sugawa). Various larval stages of *Plutella xylostella* (diamondback moth) taken from daikon planting at Monoa week ending January 12, 57 percent parasitized by an ICHNEUMON WASP (*Diadegma insularis*). (Otsuka).

Miscellaneous Pests - During December 1972, 548 GIANT AFRICAN SNAIL (*Achatina fulica*) specimens found dead or dying at Poipu, Kauai; none found at Wahiawa. On Hawaii, 188 specimens of a CARNIVORUS SNAIL (*Gonaxis quadrilateris*) released along perimeter of *A. fulica* infestation of Kahaluu. (Sugawa, Yoshioka).

DETECTION

New United States Record - AN APHID (*Muscaphis musci*) UTAH - Taken from moss (placed in Berlese funnel) collected by G.F. Knowlton in Logan Canyon, Cache County, on October 8, 1971. Determined by C.S. Wood-Baker. (Knowlton).

New State Record - A HARD TICK (*Amblyomma dissimile*) NEW HAMPSHIRE - Strafford County. (p. 5).

New County and Parish Records - ARMORED SCALES - *Pseudaonidia paeoniae* - SOUTH CAROLINA - Newberry (p. 4). *Odonaspis saccharicaulis* - FLORIDA - Okeechobee (p. 3). EUONYMUS SCALE (*Unaspis euonymi*) SOUTH CAROLINA - Williamsburg (p. 4). A GALL MIDGE (*Taxodiomyia cupressiananassa*) INDIANA - Warrick, Spencer, Perry (p. 4). ICHNEUMON WASPS - *Bathyplectis curculionis* - MISSOURI - Cass, Cedar, Barton, Cooper, Moniteau, Cole, Miller. *Diplazon laetatorius* - VIRGINIA - Botetourt (p. 6). IMPORTED FIRE ANTS (*Solenopsis* spp.) FLORIDA - Lafayette. GEORGIA - Haralson, Jenkins. TEXAS - Upshur, Marion (p. 6). PINK BOLLWORM (*Pectinophora gossypiella*) TEXAS - Archer, Baylor, Knox, Childress, Hall (p. 6). PURPLE SCALE (*Lepidosaphes beckii*) FLORIDA - Okeechobee (p. 4). WALKINGSTICK (*Diapheromera femorata*) TEXAS - Angelina (p. 4). WHITEFRINGED BEETLES (*Graphognathus* spp.) LOUISIANA - Vernon, Winn, Red River, Natchitoches. TEXAS - Hardin. GEORGIA - Pierce. KENTUCKY - McCracken. SOUTH CAROLINA - Barnwell (p. 6).

CORRECTIONS

CEIR 22(49-52):783 - Turf and Pastures - Line 7: "..., Meteorus laphygma ...," should read "..., Meteorus laphygmae ...,"

CEIR 22(49-52):784 - Beneficial Insects - Line 12: "BEETLE (Octotoma scaloripennis) ..." should read "BEETLE (Octotoma scabripennis) ..."

CEIR 22(49-52):787 - *In* A Method of determining the relative importance of economically important insects - Under Japanese beetle the 2 lines of figures should be for apples and peaches. No figures were given for ornamentals and turf. Footnote symbol for Turf should read "f."

CEIR 22(46-48):761 and 22(49-52):777 - Small Grains - "APPLE GRAIN APHID (Rhopalosiphum fitchii) ..." should read "AN APHID (Rhopalosiphum padi) ..." (Bell).

INSECT DETECTION IN THE UNITED STATES - 1972

There were 11 new United States records reported in the Cooperative Economic Insect Report during the year. These include four species reported for the first time on the North American Continent - one each in California, Florida, Maryland, and Tennessee. Of the four species reported from Hawaii, none is known to occur in the continental United States. Sixty-eight new State distribution records of pests already found in the United States were reported.

NEW UNITED STATES RECORDS

Species	State	County	Probable Origin	Collected on	CEIR Page	Economic Importance
Cardiophorus stolatus 2/ an elaterid beetle	Hawaii	Oahu Island	Asia	Under kiawe tree bark	644	Probably noneconomic
Decrosiphon corynothris 1/ an aphid	Tennessee	Carter	Europe	*Polytrichum* spp.	231	Unknown
Ectomocoris biguttulus 2/ a reduviid bug	Hawaii	Oahu Island	Southeast Asia	Light traps	567	Unknown
Eysarcoris ventralis 2/ a pentatomid bug	Hawaii	Oahu Island	Asia	Weedy areas	323	Economic
Hypoaspis nidicorva 2/ a mesostigmatic mite	Hawaii	Hawaii Island	England	Rats	310	Unknown
Larinus carlinae 1/ a weevil	Maryland	Washington	Europe	Thistle	418	Could be beneficial
Lemophagus curtus an ichneumon wasp	Michigan	Berrien	Introduced from France	Larvae of *Oulema melanopus*	337	Beneficial
Nicentrus saccharinus a sugarcane weevil	Florida	Dade	Panama	Puncture-vine	431	Could be serious on sugarcane

Species	State	County	Probable Origin	Collected on	CEIR Page	Economic Importance
Olesicoccus coccidivora 1/ a cecidomyiid midge	Florida	Dade	South America	Reared from Barbados cherry	5	Could be beneficial
Ricoseius loxocheles a phytoseiid mite	Florida	Dade	Puerto Rico or Brazil	Seagrape	193	Unknown
Scirtothrips inermis 1/ a thrips	California	Los Angeles	Spain or Canary Is.	Liquidamber trees	483	Could be serious on citrus

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1/ First time reported from North American Continent.
2/ Not known to occur in continental U.S.

NEW STATE RECORDS - 1972

Species	State	County	Collected on	CEIR Page
Agromyza frontella alfalfa leaf blotchminer	Maine	York	Alfalfa	616
	New Hampshire	Rockingham	Alfalfa	383
	Vermont	Windsor	Alfalfa	478
Anthrenus coloratus a dermestid beetle	New York	Herkimer	---	740
	North Carolina	Wake	In apartment	766
	Ohio	Hamilton	In house	740
Aphycus fumipennis an encyrtid wasp	Arizona	Yavapai	*Eriococcus euphorbiae*	781
Apion longirostre hollyhock weevil	Oklahoma	Mayes	Hollyhock seed	60
Asteromyia modesta a cecidomyiid midge	Florida	Dade	Reared from daisy fleabane	4
Bathyplectes anura an ichneumon wasp	Ohio	Warren, Wayne	Larvae of *Hypera postica*	337
Bathyplectes stenostigma an ichneumon wasp	Ohio	Wayne	Larvae of *Hypera postica*	528
Berytinus minor a stilt bug	Pennsylvania	Dauphin	Juniper	685
Caliroa lineata a sawfly	West Virginia	Fayette	White oak	544
Carneocephala sagittifera a cicadellid	Hawaii	Hawaii Island	Grasses	585
Caulocampus acericaulis maple petiole borer	Alabama	Limestone	Maple	427
Chortinaspis subchortina an armored scale	Florida	Escambia	Centipede grass	498

Species	State	County	Collected on	CEIR Page
Cinara canadensis a conifer aphid	Virginia	Montgomery	Juniper	712
Coccygomimus pedalis an ichneumon wasp	North Dakota	Benson	*Malacosoma disstria*	282
Diabrotica virgifera western corn rootworm	Idaho	Franklin	Corn	574
Empicoris orthoneuron a reduviid bug	Oklahoma	Texas	Corn	781
Eotetranychus multidigituli a spider mite	Pennsylvania	Monroe	Honeylocust	321
Eurytetranychus buxi a spider mite	Pennsylvania	Dauphin	*Buxus* sp.	604
Euxoa auxiliaris army cutworm	Michigan	Kalamazoo	Bentgrass	453
Forcipomyia fusicornis a ceratopogonid fly	Hawaii	Oahu Island	A damsel fly (*Megalagrion* sp.)	283
Galeruca rudis a chrysomelid beetle	South Dakota	Harding	Lupine	599
Gnothobleda litigiosa a reduviid bug	Oklahoma	McCurtain	At lights	741
Graphocephala cythura a cicadellid	Hawaii	Oahu Island	*Eugenia malaccensis*	339
Heterodera glycines soybean cyst nematode	Alabama	Escambia	Soybeans	531
Hyposoter frugitivus an ichneumon wasp	North Dakota	Benson	*Malacosoma disstria*	282
Itoplectis conquisitor an ichneumon wasp	North Dakota	Benson	*Malacosoma disstria*	282
Labops hesperius a grass bug	Nevada	Elko	Crested wheatgrass	6

UNITED STATES DEPART
ANIMAL AND PLANT HEA
Plant Protection and

TO COOPERATORS:

This map is based upon the results of cooperative grasshopper adult
where and how many grasshoppers infest an area, and indicates the potenti
determine population densities, and indicate those areas where control may b

Control on grasshopper infested croplands will be handled by the farr
personnel. The infested rangeland areas total 15,337,582 acres in 17 Wester
areas, infestations may be solid or spotted.

RANGELAND GRASSHC
ACREAGE BY REG

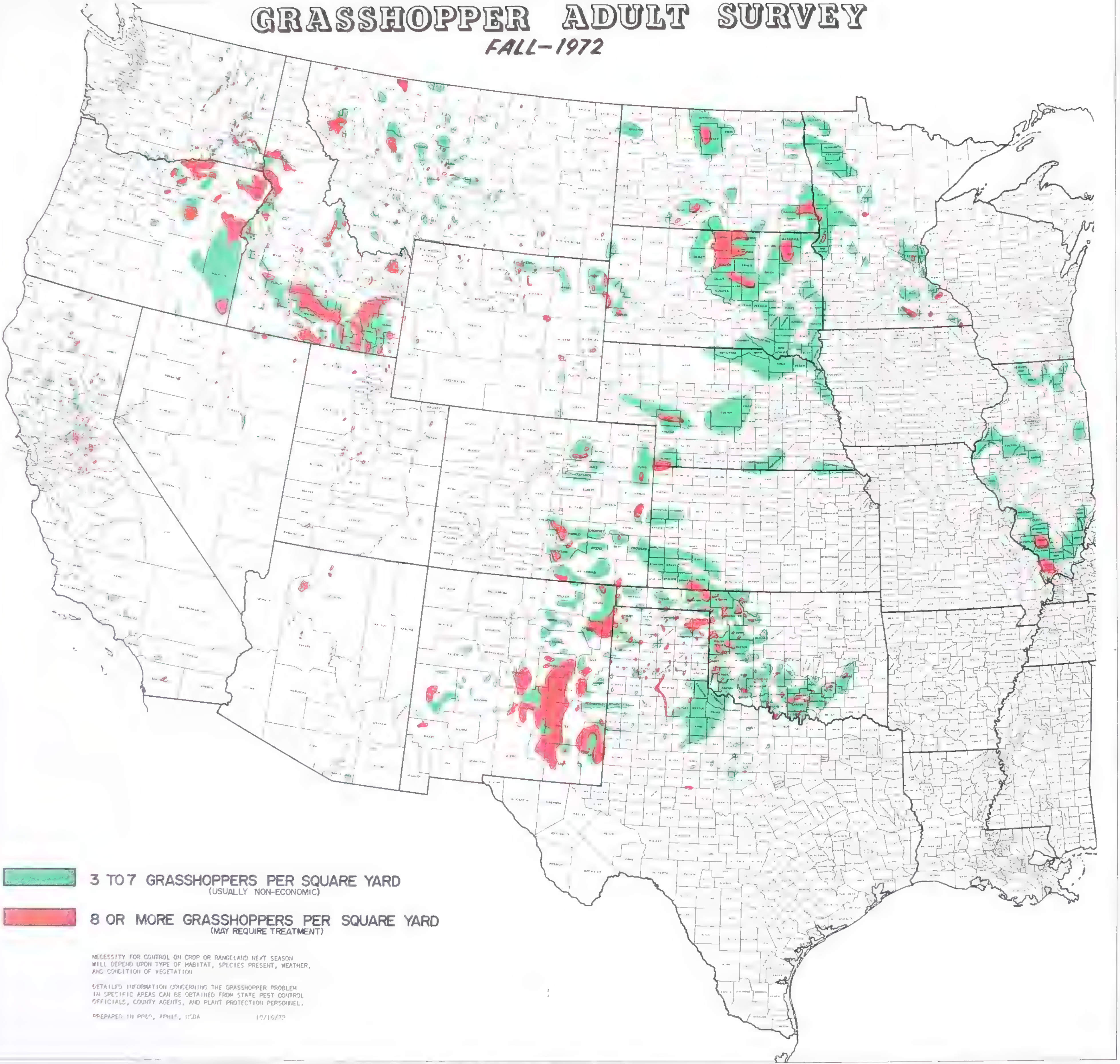
(Areas show

REGION AND STATE	LANDOWNERSHIP – ACRES		TOTAL ACRES
	PRIVATE & STATE	PUBLIC DOMAIN	
WESTERN			
Arizona	14,500	2,500	17,000
California	81,920	2,780	84,700
Colorado	503,120	77,000	580,120
Idaho	749,160	1,381,500	2,130,660
Montana	88,450	94,000	182,450
Nevada	5,100	3,200	8,300
N. Dakota	—	15,900	15,900
Oregon	1,378,740	687,220	2,065,960
S. Dakota	10,200	15,200	25,400

The survey was planned and performed by Plant Protection and Quarar

GRASSHOPPER ADULT SURVEY

FALL–1972



🟩 3 TO 7 GRASSHOPPERS PER SQUARE YARD
(USUALLY NON-ECONOMIC)

🟥 8 OR MORE GRASSHOPPERS PER SQUARE YARD
(MAY REQUIRE TREATMENT)

NECESSITY FOR CONTROL ON CROP OR RANGELAND NEXT SEASON WILL DEPEND UPON TYPE OF HABITAT, SPECIES PRESENT, WEATHER, AND CONDITION OF VEGETATION

DETAILED INFORMATION CONCERNING THE GRASSHOPPER PROBLEM IN SPECIFIC AREAS CAN BE OBTAINED FROM STATE PEST CONTROL OFFICIALS, COUNTY AGENTS, AND PLANT PROTECTION PERSONNEL.

PREPARED IN PPQ, APHIS, USDA 10/16/72

MENT OF AGRICULTURE

LTH INSPECTION SERVICE

Quarantine Programs

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a surveys made during the late summer and fall of 1972. The survey reveals

al severity of infestations for 1973. Nymphal surveys, made in the spring,

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Dihers with technical assistance from Plant Protection & Quarantine and State

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EPPER INFESTATIONS

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REGION AND STATE	LANDOWNERSHIP – ACRES		TOTAL ACRES
	PRIVATE & STATE	PUBLIC DOMAIN	
Utah	9,172	7,400	16,572
Washington	964,460	80,320	1,044,780
Wyoming	182,940	30,820	213,760
SOUTH WESTERN			
Kansas	350,000	–	350,000
Nebraska	501,000	–	501,000
New Mexico	4,637,491	717,429	5,354,920
Oklahoma	1,485,000	–	1,485,000
Texas	1,261,060	–	1,261,060

I *tine personnel in cooperation with various State Agencies concerned.*

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☆ GPO 793-110

Labops hesperius Nevada ---- wheatgrass

a grass bug

pecies	State	County	Collected on	CEIR Page
arlatoria oleae live scale	Delaware	Sussex	Cherry-leaf laurel	751
tapius spinosus leptopodid bug	Nevada	Washoe	Under boards and cardboard	43
Patasson luna a mymarid wasp	Indiana	Harrison	*Hypera postica* eggs	781
Pealius hibisci 3/ a whitefly	Florida	Volusia	Cassava in nursery	4
Petrobia latens brown wheat mite	Pennsylvania	Mifflin	Sweet-potato vine	320
Phanaeus vindex a scarab	South Dakota	Fall River	In hospital	411
Phyllobius oblongus a weevil	Maine	Penobscot	Norway maple	192
Pissodes strobi white pine weevil	California	Del Norte	Sitka spruce	763
Platytetranychus thujae a spider mite	Pennsylvania	Cumberland	Arborvitae	358
Protocalliphora hirudo a calliphorid fly	Virginia	Roanoke	House wren	766
Sanbornia juniperi an aphid	Missouri	Jasper	Juniper	779
Scambus tecumseh an ichneumon wasp	North Dakota	Benson	*Malacosoma disstria*	282
Sceptrothelys grandiclava a pteromalid wasp	Indiana	Knox	Coccoon of *Bathyplectes curculionis*	781
cyphophorus acupunctatus weevil	Mississippi	Harrison	Century plant	230
kecallis arundinariae bamboo aphid	Maryland	Montgomery	Dwarf bamboo	409

Occurs in Hawaii. This is first record for continental U.S.

UNITED STATES DEPARTMENT OF AGRICULTURE
ANIMAL AND PLANT HEALTH INSPECTION SERVICE
Plant Protection and Quarantine Programs

TO COOPERATORS:

This map is based upon the results of cooperative grasshopper adult surveys made during the late summer and fall of 1972. The survey reveals where and how many grasshoppers infest an area, and indicates the potential severity of infestations for 1973. Nymphal surveys, made in the spring, determine population densities, and indicate those areas where control may be necessary in 1973.

Control on grasshopper infested croplands will be handled by the farmers with technical assistance from Plant Protection & Quarantine and State personnel. The infested rangeland areas total 15,337,582 acres in 17 Western and Midwestern States. Areas on the map are diagrammatic. Within these areas, infestations may be solid or spotted.

RANGELAND GRASSHOPPER INFESTATIONS
ACREAGE BY REGIONS, FALL 1972

(Areas shown in red)

REGION AND STATE	LANDOWNERSHIP – ACRES		TOTAL ACRES	REGION AND STATE	LANDOWNERSHIP – ACRES		TOTAL ACRES
	PRIVATE & STATE	PUBLIC DOMAIN			PRIVATE & STATE	PUBLIC DOMAIN	
WESTERN							
Arizona	14,500	2,500	17,000	Utah	9,172	7,400	16,572
California	81,920	2,780	84,700	Washington	964,460	80,320	1,044,780
Colorado	503,120	77,000	580,120	Wyoming	182,940	30,820	213,760
Idaho	749,160	1,381,500	2,130,660	SOUTH WESTERN			
Montana	88,450	94,000	182,450				
Nevada	5,100	3,200	8,300	Kansas	350,000	—	350,000
N. Dakota	—	15,900	15,900	Nebraska	501,000	—	501,000
Oregon	1,378,740	687,220	2,065,960	New Mexico	4,637,491	717,429	5,354,920
S. Dakota	10,200	15,200	25,400	Oklahoma	1,485,000	—	1,485,000
				Texas	1,261,060	—	1,261,060

The survey was planned and performed by Plant Protection and Quarantine personnel in cooperation with various State Agencies concerned.

☆ GPO 793-110

Species	State	County	Collected on	CEIR Page
Leucophaea maderae Madeira cockroach	California	Los Angeles	In residence	782
Loxosceles rufescens a scytotid spider	Kansas	Riley	In building	464
Lyctus brunneus a powderpost beetle	Mississippi	Jackson	Mahogany door frames	167
Metrioptera roeselli a grasshopper	Maine	York	---	579
	New Hampshire	Strafford	---	481
Microlarinus lypriformis a puncturevine stem weevil	Florida	Dade	Puncturevine	337
Monarthrum fasciatum a bark beetle	Michigan	Wayne	Pine windowsills in home	411
Monocternus melliceps a juniper sawfly	Delaware	Sussex	Juniper	463
Neolasioptera nodulosa a cecidomyiid midge	Pennsylvania	York	Blackberry	409
Oligonychus aceris a spider mite	Pennsylvania	Dauphin	Silver maple	321
Oligonychus bicolor a spider mite	Pennsylvania	Allegheny	Pin oak	387
Oligonychus ilicis southern red mite	Pennsylvania	Monroe	Buxus sempervirens	387
Ooencyrtus kuwanai an encyrtid wasp	Maryland	Cecil	Porthetria dispar eggs	643
Orgyia rindgei a liparid moth	Arizona	Coconino	Pupal cases and females on several tree varieties	779
Oulema melanopus cereal leaf beetle	Missouri	St. Charles	Oats	337
	Tennessee	Pickett	Oats	309

Species	State	County	Collected on	CEIR Page
Taxodiomyia cupressiananassa a gall midge	Indiana	Vanderburgh	Bald cypress	147
Tetrastichus julis an ichneumon wasp	Indiana	Kosciusko	Field insectary	411
Theronia atalantae fulvescens an ichneumon wasp	North Dakota	Benson	Malacosoma disstria	282
Utabaenetes tanneri a camel cricket	Arizona	Coconino	---	331
Vertigo rugosula a land snail	South Carolina	Charleston	---	148
Xylosandrus germanus a scolytid beetle	Virginia	Pittsylvania	Redbud	640

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23(1-4):9-15, 1973

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INSECTS NOT KNOWN TO OCCUR IN THE UNITED STATES

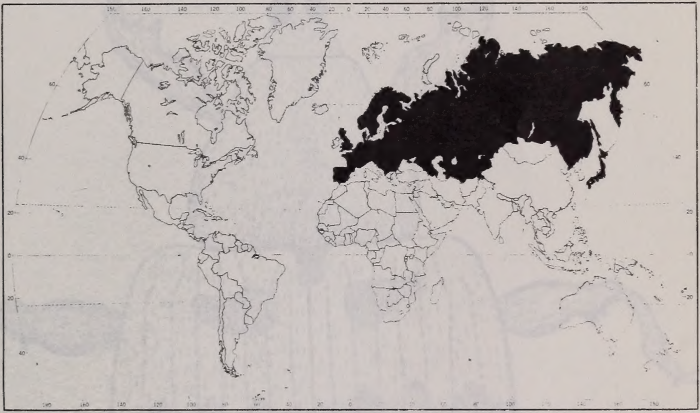
STONE FRUIT WEEVIL (Furcipus rectirostris (L.))*

Economic Importance - This weevil is a pest of stone fruit, its primary host being Prunus padus, the European Birdcherry. Wild cherries are a serious source of infestation to edible cherries. The worst damage is caused by adult maturation feeding and oviposition in young fruit. This causes some of the fruit to fall, turn moldy, or fail to mature. Losses in Switzerland have ranged from 7-81 percent of the crop with some cherries having up to 10 punctures each. Damage has reached 85 percent in other areas of Europe.

Interceptions - Since 1918, there have been 52 interceptions of this pest at U.S. ports of entry. The majority of the carriers originated in Austria but others have come from such places as France, Denmark, southern Manchuria, and Japan.

Host - Cherries are the primary host but it has also been recorded on prunes and peaches in western Russia.

Distribution - Northern and central Europe, U.S.S.R., and Japan.

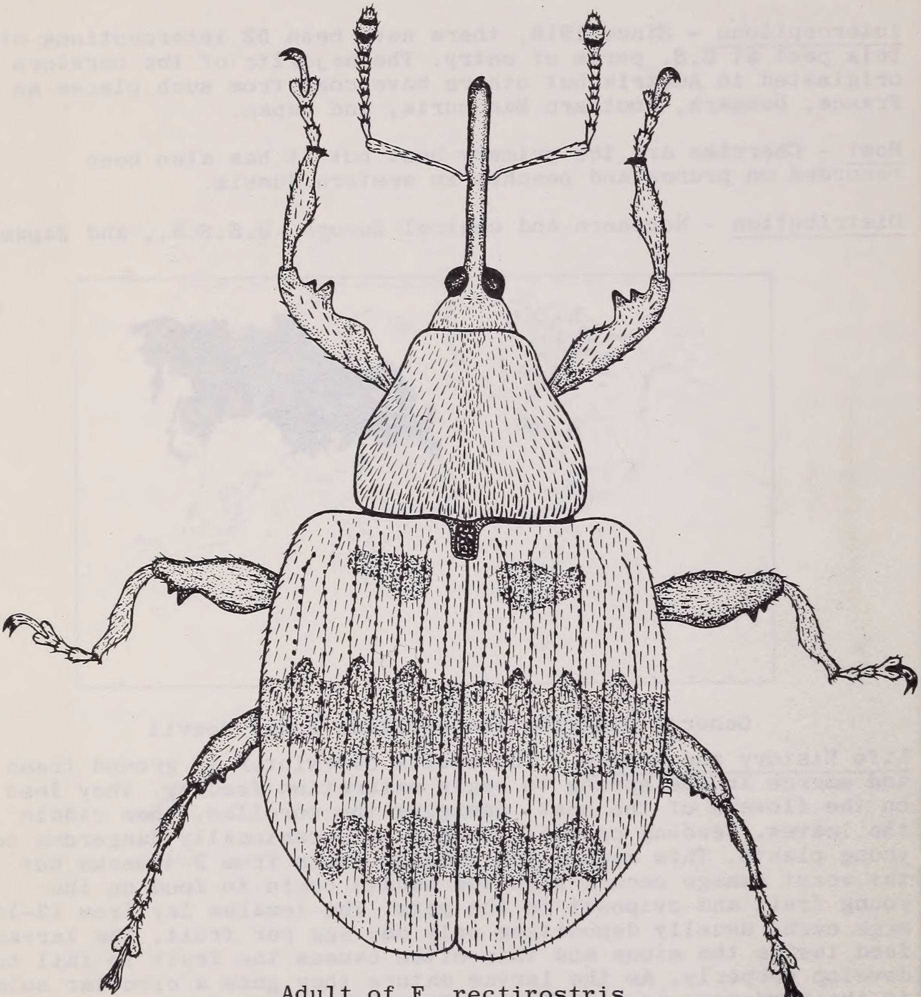


General Distribution of Stone Fruit Weevil

Life History and Habits - The adults overwinter in ground trash and emerge in the spring to begin maturation feeding. They feed on the flowers of the host, damaging the corollas, then riddle the leaves. Feeding on small shoots is occasionally dangerous to young plants. This maturation feeding lasts from 3-4 weeks but the worst damage occurs when the adults begin to feed on the young fruit and oviposit in the pits. The females lay from 12-14 eggs each, usually depositing only one egg per fruit. The larvae feed inside the stone and this often causes the fruit to fail to develop properly. As the larvae mature they gnaw a circular hole in the hardening stone which is later used for adult emergence. Pupation occurs in mid-July and the adults emerge in about 2 weeks. The young adults feed externally on the host for a short time and then go into hibernation.

*Formerly Anthonomus rectirostris. Coleoptera: Curculionidae

Description - The adults measure 4.0-4.5 mm in length and are oblong-oval. The head, legs, and abdominal sterna are reddish brown with the thorax slightly darker. The elytra vary from reddish brown to light tan. There are several alternating bands of light and dark, moderately dense setae across the elytra. One or more of the dark bands may be concentrated into a smaller area on each elytron. Other distinguishing characteristics of this monotypic genus are a very prominant, roughened scutellum and bidentate metafemora. Members of all other closely related genera have a punctate scutellum and either unidentate or unarmed metafemora. (Prepared in Pest Survey and Technical Support in cooperation with other agencies). USDA, CEIR 23(1-4):23-24, 1973.



Adult of *F. rectirostris*

Major references: Balachowsky, A. and L. Mesnil. 1935. Les Insects Nuisibles aux Plantes Cultivees. Vol. 1:48. Paris. Burke, H.R. and Monawar Ahmad. 1967. Taxonomic status and relationships of *Coccotorus* LeConte and *Furcipus* Desbrochers (Coleoptera: Curculionidae). Ann. Entomol. Soc. Am. 60(6):1152.

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